

Straw Wattles



Straw Wattles are an effective and economical alternative to silt fence and straw bales for sediment control and storm water runoff.

Straw Wattles can be placed and staked along the contour of newly constructed or disturbed slopes. Their use to capture and keep sediment on the slopes is a best management practice (BMP).

Fertile topsoil, organic matter, and native seeds are trapped behind Straw Wattles, and provide a stable medium for germination. Straw Wattles also retain moisture from rainfall, aiding the growth of tree seedlings planted to their up-slope side.

Straw Wattles are available in 9-inch diameter, 25-foot lengths and in 12-inch diameter, 10-foot lengths. They are installed by staking in place, and can be used individually or tied together to achieve any desired length.

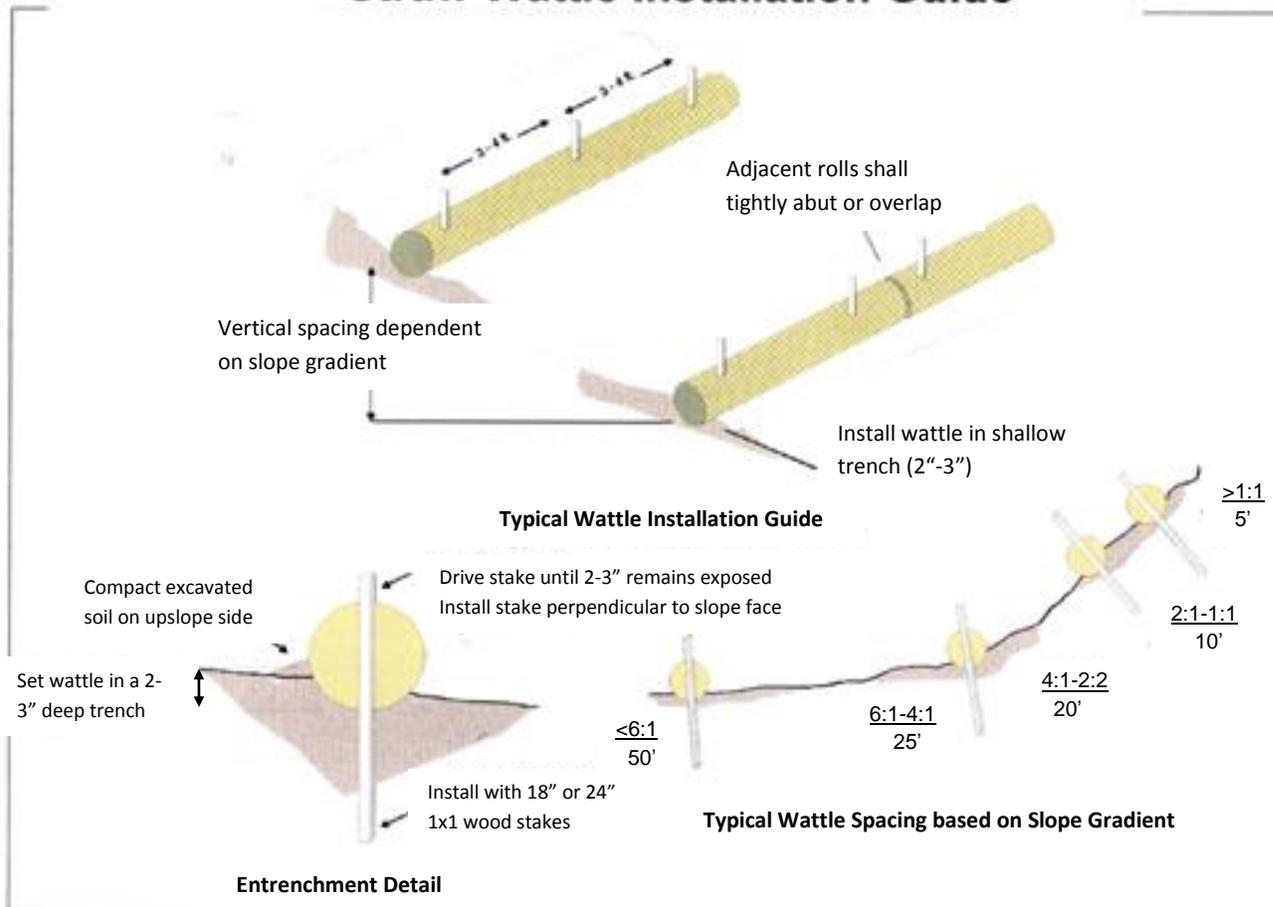
Advantages of Straw Wattles

- Increased weight per linear foot for less resistance to movement from wind, water, and sediment load
- Low-cost solution to sheet and rill erosion problems
- Replaces silt fence or straw bales on steep slopes
- Lasts up to two years
- Stores moisture for vegetation planted immediately up-slope
- The straw incorporates into the soil over time, adding organic material to the soil and retaining moisture for vegetation
- Can be staked with fascines to stabilize low-velocity stream banks and establish wetland plants

Applications for Straw Wattles

- Control Stormwater Runoff
 - Diverts flow and directs stormwater to treatment areas.
- Prevent Off-Site Sedimentation at Active Construction Sites
 - Keeps soil on-site and prevents it from washing onto pavement and asphalt; an economical and effective perimeter control alternative to silt fence and straw bales.
- Protect against Slope Erosion
 - Straw wattles work to reduce the erosive effects of slope length and steepness; the product is even more effective when installed in combination with North American Green hydraulic or rolled erosion control products.
- Capture Inlet Sedimentation
 - When wrapped around storm drain inlets, protects area drains and storm drain inlets from fast water flow and sediment.
- Work as a Check Dam
 - Prevents sheet erosion and rill and gully development on slopes and in swales and grassy waterways; in combination with a North American Green rolled erosion control blanket or turf reinforcement mat, straw wattles slow water velocity, settle out sediment, and prevent undermining of channel lining materials. Straw wattles also trap soil material that would otherwise be moved down-slope by freeze and thaw processes.
- Promote Stabilization and Revegetation of Stream Banks and Shorelines
 - Straw wattles prevent sediment pollution of streams and is an excellent complementary component for soil bioengineering projects.

Straw Wattle Installation Guide



1. Begin at the location where the wattle is to be installed by excavating a 2-3" deep X 9" wide trench along the contour of the slope. Excavated soil should be placed up-slope from the anchor trench.
 2. Place the wattle in the trench so that it contours to the soil surface. Compact soil from the excavated trench against the wattle on the uphill side. Adjacent wattles should overlap 24" – shingle in direction of flow.
 3. Secure the wattle with 18-24" stakes every 3-4' and with a stake on each end. Stakes should be driven through the middle of the wattle leaving at least 2-3" of stake extending above the wattle. Stake should be driven perpendicular to slope face.
- Straw Wattles are a Best Management Practice (BMP) that offers an effective and economical alternative to silt fence and straw bales for sediment control and storm water runoff.
 - Guidelines are provided to assist in design, installation, and structure spacing. The guidelines may require modification due to variation in soil type, rainfall intensity or duration, and amount of runoff affecting the application site.
 - To maximize sediment containment with the Straw Wattle, place the initial structure at the top/crest of the slope if significant runoff is expected from above. If no runoff from above is expected, the initial Straw Wattle can be installed at the appropriate distance downhill from the top/crest of the slope.
 - The final structure should be installed at or just beyond the bottom/toe of the slope. Wattles should be installed perpendicular to the primary direction of overland flow.
 - Straw Wattles are a temporary sediment control device and are not intended to replace rolled erosion control products (RECPs) or hydraulic erosion control products (HECPs).
 - If vegetation is desired for permanent erosion control, RECPs (erosion mats) or HECPs be used to provide effective immediate erosion control until vegetation is established.
 - Straw Wattles may be used in conjunction with blankets, mats, and mulches as supplemental sediment and runoff control for these applications. Like all sediment control devices, the effectiveness of the Straw Wattle is dependent on storage capacity.